Alabama Extended Deer Season Committee Report December 2011

FOREWORD

An extension of Alabama's deer season is a controversial issue among deer hunters in our state. The topic has been before the Conservation Advisory Board on many occasions and recently made its way before Alabama's legislature. This document was created to provide some information on the pros and cons of this issue, nothing more. The discussion points are not exhaustive. Everyone involved in hunting in Alabama has his or her own opinion on this subject. This represents a talking paper of sorts and does not express a position or conclusion on the issues of a deer season extension and was never intended to do so. I do hope it will serve as a document to inform and educate decision makers and those not familiar with the issues surrounding an extended deer season.

The committee that helped assemble this document had diverse backgrounds, views, and opinions on this subject. No statement expressed in this document is necessarily the opinion or belief of any member of the committee that helped in putting this document together. However, this document did require a great deal of time, effort, and sacrifice by the committee members who assisted with this effort, and to each of those committee members I express my sincere thanks and gratitude.

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BACKGROUND

Alabama's deer hunting season currently opens in mid-October and ends on January 31 each year. Some Alabama hunters have requested an extension of deer season into part or all of February. The primary arguments for an extended deer season are: 1) much of the breeding season of deer, or "rut", in some areas of Alabama occurs after the close of deer season on January 31 and 2) deer hunters in areas with a late rut feel their ability to harvest enough antlered bucks or larger antlered bucks is limited because the season ends before the conclusion of the breeding season.

An extended deer season could improve hunter success on harvesting antlered bucks in some areas of Alabama, at least in the short term, but this should not be the only justification for making such a change. Potential biological, social, and economic impacts of a February deer season should be thoroughly examined and weighed against the effects of not extending deer season. The overall objective of the Committee is to provide comment on the impact of an extended deer season, as well as the effects of not extending the season. We hope this report will serve as a guide and an educational tool for decision makers when discussion of the timing of Alabama's deer season arises in the future. In this undertaking the committee identified three (3) primary objectives;

- 1. To review the impact an extended deer season may have on deer management in Alabama and ways to address deer management related issues that may arise following an extended season.
- 2. To review the impact an extended deer season may have on other user groups in Alabama, primarily small game hunters.
- 3. To improve collective understanding of factors influencing timing of the deer breeding season in Alabama.

Deer Management Issues Associated with an Extended Deer Season

As with any wildlife management decision, an extension of Alabama's deer season likely would be accompanied by both real and perceived issues associated with the change. These may be biologically, socially, or economically based issues. Any discussion of extending Alabama's deer season should examine all sides of these issues. Significant issues likely to be effected by an extended deer season, as determined by the Committee, are listed below:

Biological Issues

- Lengthening Alabama's deer season likely will increase the average annual buck harvest in all or portions of the state.
- An increased buck harvest is counter to the intent of the three buck limit enacted in 2007 and likely would negate improvements to Alabama's deer herd since the new limit was put in place.
- Increased buck harvests will result in fewer mature bucks in the population.
- Increasing buck harvests without a corresponding increase in the doe harvest will create or maintain unbalanced adult sex ratios (i.e., more does than bucks).
- Increased buck harvests may require reducing season length and/or bag limits in all
 or portions of Alabama to keep the harvests at the desired level. In addition, other
 measures (i.e., mandatory tagging and reporting of harvests) may be required to
 maintain antlered buck harvest at the desired levels.
- A younger buck age structure and unbalanced adult sex ratio (i.e., more does than bucks) will cause prolonged ruts in these areas.
- Prolonged ruts result in more late born fawns. Late born fawns can remain
 physically underdeveloped for two or more years when compared to other members
 of their cohort or deer in properly managed herds.
- Prolonged ruts can result in increased post-rut mortality among bucks. This
 increased natural mortality would compound the problems of the increased buck
 harvest during an extended deer season.

Social Issues

- An extended season would allow hunters in areas where breeding extends into February to hunt more of the rut. Many hunters feel this is the only time they have a reasonable chance of harvesting an antlered buck.
- Hunters may be able to harvest more mature bucks, at least initially, if the season is extended. Hunters will have more days in the field and will be hunting at a time when deer should be more susceptible to harvest.
- Hunters may be able to fill more of their three antlered buck season bag limit if they
 are allowed to hunt more days.

Economic Issues

- Additional days of deer hunting could increase the hunting related revenue generated throughout Alabama.
- An extended deer season could generate additional license sales to deer hunters.
- If it is determined additional steps (i.e., carcass tags, mandatory reporting of harvests) are needed to limit antlered buck harvests to an acceptable level, Alabama Division of Wildlife and Freshwater Fisheries (ADWFF) will have to absorb the costs of implementing these new processes into its already limited budget. If current budgets are insufficient to fund these changes, additional licenses (e.g., deer and turkey license) and/or an increase in the current license rates will be needed.

Small Game Hunting Issues Associated with an Extended Deer Season

While issues affecting deer management and deer hunters in Alabama may be the most obvious issues likely to arise following an extended deer season, perhaps nothing may have more long-lasting effects on hunters and wildlife management in Alabama than the impact on the non-deer hunting user groups. Declines in small game hunter recruitment and retention, as well as a decrease in license sales and hunting related expenditures by small game hunters, would likely have a significant effect on the management of many wildlife species in Alabama. Non-deer related issues likely to be affected by an extension of the deer season in Alabama, as determined by the Committee, are listed below:

Social Issues

- Most private lands in Alabama hunted primarily for deer grant very limited access for small game hunters (i.e., rabbit, squirrel, quail, and raccoon hunters) from November through January. Although hunting season for most small game extends from October 1 to the end of February, the period from late November through February is the preferred time to hunt for most small game hunters. For many small game hunters, the only time hunting access is granted on these deer hunted properties is in February after the close of deer season. Extending deer season into February would greatly reduce the already limited access to these properties for small game hunters.
- Reduced hunting access for small game hunters on private properties hunted primarily for deer may result in a decline in small game hunter numbers in Alabama, as many small game hunters may either quit hunting altogether, or hunt in other states with more hunting land access during January and February.
- The potential decline in small game hunting tied to a deer season extension could represent a threat to future wildlife conservation efforts, as well as a loss of an Alabama tradition. For many decades, young people were traditionally introduced to nature and hunting through small game hunting. Young hunters learned self-discipline, responsibility, and an appreciation of natural resource utilization in this way. We are seeing a major disconnect between peoples' attitudes/perceptions and natural resource conservation in Alabama, as well as most of the U.S. This disconnect will have negative political ramifications for conservation and wise utilization of Alabama's natural resources and, consequently, elimination of one of our best conservation training schools (i.e., small game hunting) and may be a dangerous step in the long-term. Public support for hunting, conservation groups, and state management agencies could wane as our population becomes increasingly insulated from wise conservation principles.

Economic Issues

- A decline in the number of small game hunters due to lost hunting opportunities has the potential to reduce the sale of small game hunting licenses and small game hunting related goods in Alabama.
- A reduction in the sale of hunting licenses to small game hunters may have a
 negative effect on funding provided to ADWFF through the Federal Aid in Wildlife
 Restoration Act (i.e., Pittman-Robertson Act). These Federal monies are the primary
 funding source for the Wildlife Section of ADWFF. A loss of funding for wildlife
 management efforts in Alabama likely may have long-term negative impacts on all
 user groups, game species of wildlife, and many non-game species of wildlife in
 Alabama.

FACTORS INFLUENCING TIMING OF THE RUT IN ALABAMA

It is an established fact that most deer in Alabama breed late in comparison to deer in other parts of the whitetail's range. For reasons yet to be fully explained, deer from remnant populations in southwest Alabama, which supplied most of the deer for the restocking efforts in the state, tend to breed and fawn later than is typical with most other deer populations. Conversely, areas in Alabama restocked from source populations outside the state have breeding dates more in line with those reported from most of the whitetail's range. Many biologists researching this phenomenon attribute the difference in breeding dates to genetic factors related to stocking source.

Since 1995, ADWFF wildlife biologists have collected data to examine the reproductive health of white-tailed deer populations in Alabama. Over 1,650 does from 81 sites in 42 counties have been collected and examined to evaluate the herds' reproductive health. Conception dates range from late October until late March across the state, with most conception dates (61.8%) being in January. The majority (77.3%) of conception dates were within the current hunting season structure, while 22.7% of these dates were February 1 or later.

Several items should be considered when reviewing these conception date data. These include:

- There is a genetic component associated with breeding that establishes a pre-set period in which reproduction should normally take place. This appears to be determined by the stocking source for the current populations.
- Management of population dynamics, particularly adult sex ratio and buck age structure, has the effect of establishing where in the genetically pre-set window breeding takes place – earlier or later.
- Sample size both number of deer collected and number of years sampled has
 a significant influence on calculation of average conception/fawning dates, range
 of conception/fawning dates, etc.

Genetic Influence/Stocking Source

A review of data collected to date by ADWFF's Wildlife Section shows an undeniable influence from the original stocking source for the local deer herd. Deer from several sources, including many from outside Alabama, were used to restock the state. In general, areas stocked with deer from outside Alabama have much earlier breeding dates than populations stocked with deer from the primary stocking source, Fred T. Stimpson Sanctuary in Clarke County. Some of these areas include Black Warrior WMA, Choccolocco WMA, and Oakmulgee WMA. Most areas stocked with deer from the Stimpson Sanctuary have conception dates from mid-January to mid-February, which is consistent with current conception dates at Stimpson Sanctuary. Based on these findings, there appears to be a genetic component associated with breeding that establishes a pre-set period in which reproduction should normally take place. It also appears areas outside of southern Alabama with no record of restocking have earlier average conception dates than areas stocked with deer from Clarke County. These populations apparently originated from small remnant herds that were able to persist during the era of exploitation that occurred during the late 1800's and early 1900's. A map showing the location of each known deer restocking site in Alabama since the 1920's and the source of the deer used in each restocking is shown in **Appendix 1**.

The influence of stocking source is clearly evident in data collected from Barbour County. Data collected from three sites in Barbour County—Eufaula NWR, Foy Property, and Barbour WMA—has identified three distinct breeding periods for deer, each separated by one month from mid-November through mid-January. Follow up DNA analysis of these populations identified three genetically distinct populations, with the Barbour WMA population being genetically identical to the population of Fred T. Stimpson Sanctuary. Barbour WMA was restocked with deer from Stimpson Sanctuary in the early and mid 1950's. Differences in breeding/fawning dates among the three Barbour County sites remained unchanged for a sampling period of five years.

Collecting reproductive data is a time consuming, yet important part of managing Alabama's deer population. Collecting data from areas with little or no past data is a top priority for ADWFF Wildlife Section staff. As more data are gathered, a clearer understanding of conception dates and reproductive health for deer populations throughout Alabama will be possible. Predicting conception dates for areas without data is difficult due to variation caused by stocking source and deer management philosophies. A summary of data from all collection sites, including earliest and latest conception dates, average conception dates, year of last collection, number of year's sampled, and total number of deer collected, is shown in **Appendix 2**. A map showing the location of each collection site is found in **Appendix 3**.

Deer Management History, Philosophy, & Practices

The estrous period for a white-tailed deer is very short. A doe is only capable of conception for roughly 24-48 hours once she enters estrus (i.e., heat). If she is not bred at that time, she will come back into heat 28 to 30 days later. Adult does will continue to go into and out of estrus until they are bred, which leads to prolonged, low intensity ruts. Breeding may occur over a period of 40 or more days (usually more), with no well-

defined peak, in this scenario. The average date of conception also tends to be later in these populations when compared to properly managed deer herds.

Sound deer management principles ensure deer herds function naturally in their reproductive behaviors. Poorly managed herds typically are characterized by a young buck age structure resulting from an over harvest of bucks (particularly young bucks) and an adult sex ratio skewed heavily toward females resulting from the over harvest of bucks and an under harvest of does. The effect on breeding often is manifested in conceptions occurring on second or subsequent estrous cycles simply because there aren't enough bucks in the population to breed all receptive does on their first cycle. Additionally, the lack of older age bucks results in reduced signpost behaviors (rubs and scrapes) and the associated deposition of scent (pheromones) that are required for an early synchronized estrous.

Samples from deer herds managed for a more balanced adult sex ratio (i.e., approaching one adult doe per antlered buck) and mature buck age structure indicate conception dates generally occur earlier and within a relatively compressed range. In these herds, the range of conception dates in most years is between 14 to 21 days, with a defined peak occurring over a 7-10 day period.

Alabama's antlered buck season limit was lowered to three prior to the 2007-08 hunting season. This reduction to the annual limit followed a recommendation from a committee formed to study the buck limits in Alabama. The committee concluded a reduced antlered buck limit likely would lead to fewer bucks and more does being killed each year, which would result in a more balanced adult sex ratio across the state. The reduced buck kill also would lead to an older buck age structure across the state. Populations with a balanced adult sex ratio and an older buck age structure typically have a more compressed breeding season and breeding often is initiated earlier than in populations with adult sex ratios rated heavily toward does and younger buck age structures. The annual estimated buck harvest has declined markedly since the 3-buck limit was implemented. The percentage of does in the harvest also has increased significantly when compared to years prior to the lowered buck limit (i.e., 52.5% before vs. 57% after). Hunters should see more compressed rut and possibly earlier breeding in many areas of Alabama if the current deer harvest trends continue.

Influence of Sample Size on Data Interpretation

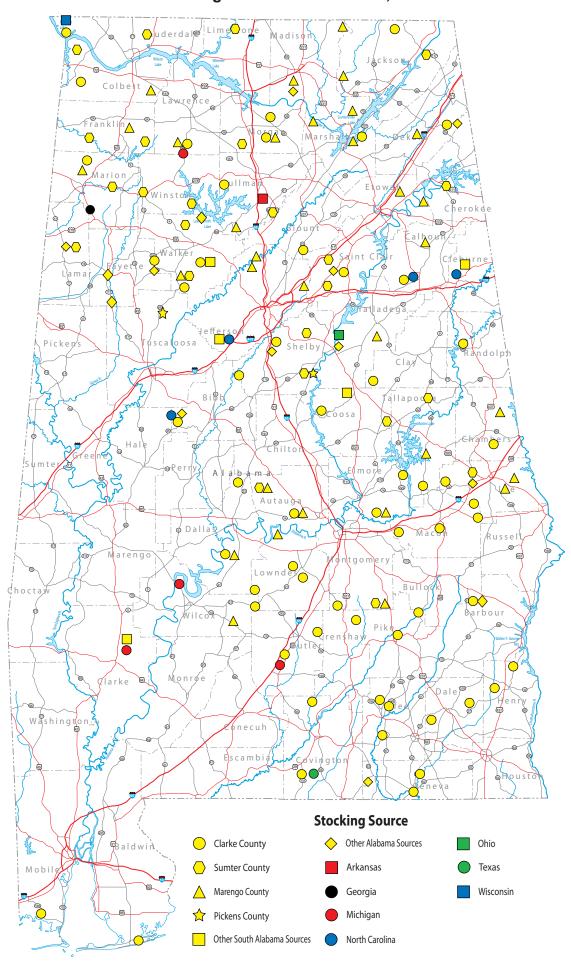
Sample size must be considered when interpreting conception and fawning date data. For these purposes, sample size refers to not only the number of deer collected at a site, but more importantly, the number of collections made on that site (i.e. how many years of data were collected). Ideally, data are collected from a site for a period of several years (e.g., three to five), with a sample of five or more deer collected annually. Multiple years of data often reveal years with conception dates outside of the "normal" range for the site. The reasons for these statistical deviations are numerous and could be due to a wide variety of environmental factors (e.g., extreme cold, prolonged flooding). Larger sample sizes (multiple years) allow for identification of the normal range for a property. Larger sample sizes also allow for identification of does bred on their second, third, or

later estrous cycles. Even a couple of late or early breeders in one year's sample will skew results as they relate to average dates of conception and fawning.

One year of data and/or a small sample size (e.g., one or two deer) can be misleading when reviewing deer reproductive data. This has been observed on sites with a long history of data collection. Average conception dates can vary by as much as two weeks or more on a site even with the absence of substantial changes in age structure or sex ratio. Many collection sites have been sampled for only one or two years. An increased sample size of three to five consecutive years from these sites may reveal average conception dates different from the ones found in the current sample. Wildlife management decisions based on such small sample sizes may be premature and unwise.

Appendices

APPENDIX 1: Deer restocking locations in Alabama, 1925-1998.



APPENDIX 2: Summary of deer conception date data collected in Alabama, 1995-2011.

County	Site Number	Map Code	Range of Conception Dates		Range of Parturition Dates		Average Conception	Average Parturition	Last Collection	Number of Years	Number of Deer
		0000	Earliest	Latest	Earliest	Latest	Date	Date	Collection	Sampled	Collected
Baldwin	1	1	Jan. 11	Feb. 16	Jul. 28	Sep. 02	Feb. 02	Aug. 19	2011	2	24
Barbour	1	2	Nov. 23	Jan. 17	Jun. 09	Aug. 03	Dec. 28	Jul. 14	2000	3	31
Barbour	2	3	Dec. 30	Feb. 22	Jul. 16	Sep. 08	Jan. 22	Aug. 08	2011	13	123
Barbour	3	4	Oct. 25	Jan. 04	May. 11	Jul. 21	Nov. 22	Jun. 08	2000	3	37
Barbour	4	5	Jan. 08	Feb. 24	Jul. 25	Sep. 10	Jan. 30	Aug. 16	2000	2	18
Barbour	5	6	Jan. 31	Feb. 11	Aug. 17	Aug. 28	Feb. 04	Aug. 21	1997	1	5
Bullock	1	7	Dec. 27	Jan. 27	Jul. 13	Aug. 13	Jan. 12	Jul. 29	1999	1	8
Bullock	2	8	Dec. 29	Feb. 09	Jul. 15	Aug. 26	Jan. 16	Aug. 02	2001	3	30
Bullock	3	9	Dec. 10	Feb. 20	Jun. 26	Sep. 06	Jan. 15	Aug. 01	2002	2	20
Bullock	4	10	Jan. 17	Feb. 17	Aug. 03	Sep. 03	Jan. 28	Aug. 14	2002	1	10
Butler	1	11	Feb. 02	Feb. 10	Aug. 19	Aug. 27	Feb. 06	Aug. 23	2010	1	2
Cherokee	1	12	Nov. 28	Jan. 22	Jun. 14	Aug. 08	Dec. 21	Jul. 07	2010	7	33
Cherokee	2	13	Dec. 03	Dec. 27	Jun. 18	Jul. 13	Dec. 18	Jul. 03	2011	2	15
Clarke	1	14	Jan. 18	Feb. 01	Aug. 04	Aug. 18	Jan. 24	Aug. 10	1996	1	9
Clarke	2	15	Jan. 23	Feb. 27	Aug. 09	Sep. 13	Feb. 09	Aug. 26	2011	3	31
Clarke	3	16	Jan. 12	Feb. 06	Jul. 29	Aug. 23	Jan. 28	Aug. 14	2002	1	12
Cleburne	1	17	Nov. 20	Jan. 06	Jun. 06	Jul. 23	Dec. 11	Jun. 26	2011	2	18
Coffee	1	18	Jan. 17	Feb. 26	Aug. 03	Sep. 12	Jan. 31	Aug. 17	2011	2	22
Colbert	1	19	Jan. 16	Feb. 04	Aug. 02	Aug. 21	Jan. 26	Aug. 12	1997	1	10
Colbert	2	20	Jan. 13	Feb. 25	Jul. 30	Sep. 11	Jan. 28	Aug. 14	1997	1	10
Colbert	3	21	Jan. 18	Jan. 23	Aug. 04	Aug. 09	Jan. 20	Aug. 06	2010	1	2

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		0000	Earliest	Latest	Earliest	Latest	Date	Date	Concention	Sampled	Collected
Colbert	4	22	Jan. 07	Feb. 09	Jul. 24	Aug. 26	Jan. 23	Aug. 09	2011	1	6
Conecuh	1	23	Jan. 18	Feb. 26	Aug. 04	Sep. 12	Feb. 06	Aug. 23	2011	3	28
Coosa	1	24	Jan. 07	Mar. 01	Jul. 24	Sep. 15	Jan. 25	Aug. 11	2002	4	27
Covington	1	25	Dec. 19	Feb. 18	Jul. 05	Sep. 04	Jan. 17	Aug. 03	2003	5	57
Cullman	1	26	Jan. 06	Jan. 06	Jul. 23	Jul. 23	Jan. 06	Jul. 23	2011	1	1
Dale	1	27	Dec. 28	Feb. 26	Jul. 14	Sep. 12	Jan. 27	Aug. 13	2001	5	54
Dallas	1	28	Jan. 10	Feb. 06	Jul. 27	Aug. 23	Jan. 22	Aug. 08	2001	2	10
Dallas	2	29	Jan. 06	Feb. 19	Jul. 23	Sep. 05	Jan. 23	Aug. 09	1998	2	12
Dallas	3	30	Jan. 23	Feb. 09	Aug. 09	Aug. 26	Jan. 31	Aug. 17	2005	1	5
Dallas	4	31	Jan. 11	Feb. 03	Jul. 28	Aug. 20	Jan. 20	Aug. 06	2011	1	3
Escambia	1	32	Jan. 11	Mar. 04	Jul. 28	Sep. 18	Feb. 08	Aug. 25	2001	2	22
Franklin	1	33	Nov. 23	Feb. 12	Jun. 09	Aug. 29	Jan. 14	Jul. 31	2011	2	8
Geneva	1	34	Jan. 06	Feb. 07	Jul. 23	Aug. 24	Jan. 23	Aug. 09	2011	2	21
Greene	1	35	Jan. 09	Feb. 03	Jul. 26	Aug. 20	Jan. 18	Aug. 04	1996	1	6
Greene	2	36	Jan. 08	Jan. 08	Jul. 25	Jul. 25	Jan. 08	Jul. 25	2002	1	1
Greene	4	37	Jan. 08	Feb. 08	Jul. 25	Aug. 25	Jan. 24	Aug. 10	2010	1	5
Hale	1	38	Dec. 29	Feb. 03	Jul. 15	Aug. 20	Jan. 16	Aug. 02	2006	4	34
Hale	2	39	Dec. 07	Jan. 08	Jun. 23	Jul. 25	Dec. 19	Jul. 05	2010	2	6
Hale	3	40	Jan. 01	Feb. 10	Jul. 18	Aug. 27	Jan. 21	Aug. 07	2011	1	6
Henry	1	41	Jan. 06	Feb. 13	Jul. 23	Aug. 30	Jan. 26	Aug. 12	2011	2	22
Houston	1	42	Dec. 02	Feb. 16	Jun. 18	Sep. 02	Dec. 27	Jul. 13	1999	3	30

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		0000	Earliest	Latest	Earliest	Latest	Date	Date	Concention	Sampled	Collected
Houston	2	43	Dec. 18	Jan. 02	Jul. 04	Jul. 19	Dec. 26	Jul. 12	1998	1	3
Jackson	1	44	Jan. 03	Mar. 26	Jul. 20	Oct. 10	Jan. 29	Aug. 15	2011	8	141
Jackson	2	45	Dec. 29	Feb. 03	Jul. 15	Aug. 20	Jan. 05	Jul. 22	2011	2	15
Lauderdale	1	46	Jan. 05	Feb. 23	Jul. 22	Sep. 09	Jan. 23	Aug. 09	2000	2	18
Lauderdale	2	47	Dec. 17	Jan. 18	Jul. 02	Aug. 04	Dec. 30	Jul. 15	2011	2	19
Limestone	1	48	Nov. 28	Jan. 03	Jun. 13	Jul. 20	Dec. 18	Jul. 03	2011	1	9
Limestone	2	49	Feb. 09	Feb. 09	Aug. 26	Aug. 26	Feb. 09	Aug. 26	2011	1	1
Lowndes	1	50	Dec. 30	Feb. 19	Jul. 16	Sep. 05	Jan. 24	Aug. 10	2011	6	56
Lowndes	2	51	Jan. 22	Feb. 16	Aug. 08	Sep. 02	Feb. 02	Aug. 19	2003	1	10
Macon	1	52	Jan. 10	Mar. 10	Jul. 27	Sep. 24	Feb. 03	Aug. 20	2010	7	56
Macon	2	53	Dec. 18	Feb. 14	Jul. 04	Aug. 31	Jan. 12	Jul. 29	2009	5	43
Madison	1	54	Nov. 29	Mar. 01	Jun. 15	Sep. 15	Jan. 29	Aug. 15	2011	7	66
Marengo	1	55	Jan. 03	Feb. 22	Jul. 20	Sep. 08	Jan. 20	Aug. 06	2002	2	21
Marengo	2	56	Jan. 17	Feb. 06	Aug. 03	Aug. 23	Jan. 26	Aug. 12	2001	2	4
Marengo	3	57	Jan. 14	Jan. 30	Jul. 31	Aug. 16	Jan. 22	Aug. 08	2006	1	10
Marengo	4	58	Jan. 14	Jan. 28	Jul. 31	Aug. 14	Jan. 20	Aug. 06	2010	1	5
Marengo	5	59	Jan. 18	Jan. 18	Aug. 03	Aug. 03	Jan. 18	Aug. 03	2008	1	1
Marion	1	60	Dec. 31	Jan. 23	Jul. 17	Aug. 09	Jan. 11	Jul. 28	2011	2	18
Mobile	1	61	Jan. 28	Feb. 21	Aug. 14	Sep. 07	Feb. 03	Aug. 20	2010	1	9
Mobile	2	62	Jan. 24	Feb. 19	Aug. 10	Sep. 05	Feb. 02	Aug. 19	2011	1	10
Monroe	1	63	Feb. 14	Mar. 31	Aug. 31	Oct. 15	Mar. 04	Sep. 18	2011	1	6

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		0000	Earliest	Latest	Earliest	Latest	Date	Date	Concention	Sampled	Collected
Perry	1	64	Jan. 20	Feb. 05	Aug. 06	Aug. 22	Jan. 27	Aug. 13	2007	3	5
Pickens	1	65	Dec. 10	Feb. 22	Jun. 26	Sep. 08	Jan. 10	Jul. 27	2008	13	110
Pickens	2	66	Dec. 26	Dec. 26	Jul. 12	Jul. 12	Dec. 26	Jul. 12	2004	1	1
Pickens	3	67	Dec. 21	Jan. 18	Jul. 06	Aug. 04	Jan. 02	Jul. 19	2011	2	10
Pike	1	68	Jan. 16	Mar. 07	Aug. 02	Sep. 21	Feb. 04	Aug. 21	2011	2	20
Randolph	1	69	Jan. 18	Feb. 22	Aug. 04	Sep. 08	Feb. 06	Aug. 23	2010	1	7
Russell	1	70	Dec. 10	Feb. 15	Jun. 26	Sep. 01	Jan. 12	Jul. 29	2000	4	45
Sumter	1	71	Jan. 07	Mar. 08	Jul. 24	Sep. 22	Jan. 27	Aug. 13	2011	5	32
Tuscaloosa	1	72	Jan. 05	Jan. 27	Jul. 22	Aug. 13	Jan. 13	Jul. 30	2001	1	7
Tuscaloosa	2	73	Dec. 21	Feb. 18	Jul. 07	Sep. 04	Jan. 08	Jul. 25	2011	8	70
Tuscaloosa	3	74	Dec. 17	Jan. 17	Jul. 03	Aug. 03	Jan. 01	Jul. 18	2002	2	20
Tuscaloosa	4	75	Nov. 21	Jan. 29	Jun. 07	Aug. 15	Jan. 08	Jul. 25	2001	1	9
Tuscaloosa	5	76	Dec. 21	Dec. 21	Jul. 07	Jul. 07	Dec. 21	Jul. 06	2009	1	1
Walker	1	77	Jan. 19	Feb. 20	Aug. 05	Sep. 06	Feb. 03	Aug. 20	1999	1	10
Walker	2	78	Dec. 06	Jan. 25	Jun. 22	Aug. 11	Dec. 26	Jul. 12	2003	2	21
Washington	1	79	Dec. 31	Feb. 06	Jul. 17	Aug. 23	Jan. 22	Aug. 08	2004	1	11
Washington	2	80	Jan. 16	Feb. 20	Aug. 02	Sep. 06	Feb. 02	Aug. 19	2011	2	21
Winston	1	81	Nov. 03	Dec. 22	May. 20	Jul. 08	Dec. 01	Jun. 16	2011	2	14
Winston	2	82	Nov. 16	Dec. 21	Jun. 02	Jul. 07	Dec. 06	Jun. 22	2010	1	4

APPENDIX 3: Deer collection sites in Alabama, 1995-2011.

